Application No.: 10/082,564

Amendment dated January 27, 2004

Reply to Office Action of October 1, 2003

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A process for the partial purification of pond water such that said pond water can be further purified by the removal of essentially pure water without solids precipitation, comprising the steps of:

adding a first compound to a quantity of pond water to increase the pH of the resulting solution, said first compound being a base or forming a base when water is present, said first compound having a cationic portion <u>such</u> that causes the phosphate salts thereof [[to]] remain soluble in said solution,

allowing [[the]] <u>any precipitates [[thus]] formed as a result of the addition of the first compound</u> to settle,

separating the <u>precipitates and recovering a</u> clarified liquid portion of the mixture, holding said <u>clarified</u> liquid portion of the mixture for a time period sufficient to allow [[the]] <u>any</u> silicic acid present <u>in the clarified portion</u> to decompose into <u>a</u> hydrated silicon dioxide <u>sludge</u>, separating the hydrated silicon dioxide sludge <u>and recovering a</u> <u>clear solution</u>; and

adding a second compound to decrease the pH of the <u>clear</u> solution, said [[added]] second compound being an acid or acid-forming compound such that the solubility of the ions remaining in <u>the clear</u> solution is increased.

- 2. (Original) The process, as claimed in claim 1, wherein said first compound is selected from the group including sodium hydroxide and potassium hydroxide.
- 3. (Original) The process, as claimed in claim 1, wherein said first compound is ammonia.

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- 4. (Original) The process, as claimed in claim 1, wherein said first compound is added to said pond water as an aqueous solution.
- 5. (Original) The process, as claimed in claim 1, wherein said first compound is added to said pond water in anhydrous or essentially anhydrous form.
- 6. (Original) The process, as claimed in claim 1, wherein said first compound is added to said pond water in sufficient quantity to increase the pH of said resulting solution to a value within the range of 6.0 to 8.0.
- 7. (Original) The process, as claimed in claim 1, wherein said first compound is added to said pond water in sufficient quantity to increase the pH of said resulting solution to a value within the range of 6.5 to 7.5.
- 8. (Currently Amended) The process, as claimed in claim 1, wherein after separating an essentially clear the clarified liquid from said precipitates formed as a result of the addition of said first compound, the [[clear]] clarified liquid is aged for a time period within the range of 16 hours to 10 days.
- 9. (Currently Amended) The process, as claimed in claim 1, wherein after separating an essentially clear the clarified liquid from the sludge formed as a result of the addition of the first compound, the [[clear]] clarified liquid is aged for a time period within the range of 36 hours to 72 hours.
- 10. (Currently Amended) The process, as claimed in claim 1, wherein after separating said hydrated silicon dioxide sludge, said second compound is added to said clear <u>liquid solution</u> thus obtained in sufficient quantity to lower the pH of the solution to a value within the range of 2.0 to 4.0.
- 11. (Currently Amended) The process, as claimed in claim 1, wherein after separating said hydrated silicon dioxide sludge, said second compound is added to said

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clear <u>liquid</u> solution thus obtained in sufficient quantity to lower the pH of the solution to a value within the range of 2.5 to 3.5.

- 12. (Currently Amended) The process, as claimed in claim 1, wherein after separating said hydrated silicon dioxide sludge, said second compound is added to said clear <u>liquid solution</u> thus obtained in sufficient quantity to lower the pH of the solution to a value within the range of 2.9 to 3.1.
- 13. (Currently Amended) The process, as claimed in claim 1, wherein said second compound added to said clear <u>liquid solution</u> obtained after the separation of said hydrated silicon dioxide sludge is selected from the group including sulfuric acid, sulfurous acid, phosphoric acid, hydrochloric acid and nitric acid.
- 14. (Currently Amended) The process, as claimed in claim 1, wherein said second compound added to said clear <u>liquid solution</u> obtained after the separation of said hydrated silicon dioxide sludge is sulfuric acid.
- 15. (Currently Amended) The process, as claimed in claim 1, wherein after separating said hydrated silicon dioxide sludge, said second acid-forming compound is added to said clear <u>liquid solution</u> thus obtained in sufficient quantity to lower the pH of the solution to a value within the range of 2.0 to 4.0.
- 16. (Currently Amended) The process, as claimed in claim 1, wherein after separating said hydrated silicon dioxide sludge, said second acid-forming compound is added to said clear liquid solution thus obtained in sufficient quantity to lower the pH of the solution to a value within the range of 2.5 to 3.5.
- 17. (Currently Amended) The process, as claimed in claim 1, wherein after separating said hydrated silicon dioxide sludge, said second acid-forming compound is added to said clear liquid solution thus obtained in sufficient quantity to lower the pH of the solution to a value within the range of 2.9 to 3.1.

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18. (Currently Amended) The process, as claimed in claim 1, wherein said second acid forming compound added to said clear liquid solution obtained after the separation of said hydrated silicon dioxide sludge, is selected from the group including sulfur trioxide, sulfur dioxide, hydrogen chloride and nitrogen dioxide.